

ABSTRACT

A Virtual Single Account (VSA) system that provides a mobile user with automatic authentication and connection to a remote network via local access networks with a single password, where the local access networks may be independent of the remote network. A mobile user has a single authentication credential for one VSA that is utilized by a VSA client installed on a mobile computing device. The VSA client provides for automatically authenticating and connecting the user's mobile device to a current local access network, and the target remote network such as the user's office network. All authentication credentials are encrypted using a key generated from the user's VSA password that is generated from the user's single password. The VSA client derives the key from the submitted VSA password and decrypts all authentication credentials that are required in order to connect the mobile device to the current local access network and thereafter to the office network.